

**OIML Member State**  
The Netherlands

Number R60/2017-A-NL1-22-34 revision 0  
Project number 2506809  
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Issuing authority

NMi Certin B.V.  
Person responsible: M.Ph.D. Schmidt

Applicant and  
Manufacturer

Giropes SL  
Pol. Ind. Empordà Internacional, C/ Molló 3  
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Spain

Identification of the  
certified type

A **single point load cell**, with strain gauges.  
Registered trade name : GIROPES  
Type : GY17  
GY18  
GY19

Characteristics

See next page

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R 60-1:2017** for accuracy class C

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

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Issuing Authority

**NMi Certin B.V., OIML Issuing Authority NL1**  
6 October 2022

Certification Board

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The notification of NMi Certin B.V. as Issuing Authority can be verified at [www.oiml.org](http://www.oiml.org)

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon on top of the electronic version of this certificate.



The conformity was established by the results of tests and examinations provided in the associated OIML Test Reports:

- No. NMI-2287911-09 dated 29 July 2022 that includes 50 pages;
- No. NMI-2287911-10 dated 29 July 2022 that includes 46 pages.

### Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell	
Model	GY17, GY18, GY19	
Maximum capacity ( $E_{max}$ )	50 kg up to 500 kg	500 kg up to and including 1000 kg
Minimum dead load	0 kg	
Accuracy Class	C	
Rated Output	2 mV/V $\pm$ 0,3 mv/V	
Maximum number of load cell intervals (n) <sup>(1)</sup>	6000	
Ratio of minimum LC Verification interval <sup>(1)</sup> $Y = E_{max} / V_{min}$	20000	17000
Ratio of minimum dead load output return <sup>(1)</sup> $Z = E_{max} / (2 * DR)$	6000	
Input impedance	404 $\Omega$ $\pm$ 10 $\Omega$	
Temperature range	-10 °C / + 40 °C	
Fraction $p_{LC}$	0,7	
Humidity Class	NH	
Safe overload	150 % of $E_{max}$	
Output impedance	350 $\Omega$ $\pm$ 3 $\Omega$	
Recommended excitation	10 V AC / DC	
Excitation maximum	15 V AC / DC	
Transducer material	Aluminium	
Atmospheric protection	Silicon rubber	

### Remarks:

1. The characteristics for  $n_{max}$ , Y and Z can be reduced separately.

Each load cell produced is provided with an accompanying document with information about its characteristics.



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The above identified Type (represented by the sample(s) identified in the OIML Test Report) have been found to comply with the additional national requirements established by the United States of America (NIST Handbook 44 and NCWM Publication 14), included in the Utilizer Declaration:

- R 60 OIML-CS rev.2 Additional requirements from the United States Accuracy class III L;
- R 60 OIML-CS rev.2 Additional requirements from the United States Marking requirements.

## Revision History

Revision	Date	Change
0	2022-10-06	Initial issue.